ORIGINAL

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
Policies and Rules	)	CC Docket No. 93-292
concerning Toll Fraud	)	

REPLY COMMENTS

Intecom, Inc. hereby submits these reply comments in response to the notice released December 2, 1993, in the above mentioned proceeding[1], and in response to comments received regarding that notice. The NPRM seeks comments and reply comments on what policies should be implemented, or steps taken, to avoid or reduce the incidence of toll fraud. In particular, Intecom has a direct interest in issues regarding PBX toll fraud. The following are Intecom's reply comments.

I. Existing Market Forces

Intecom supports the point made by both Ericsson[2] and AT&T[3] that appropriate incentives already exist within the marketplace to encourage manufacturers to continue to develop new and improved system security capabilities. In response to these market forces, like other manufacturers of PBX equipment, Intecom offers a wide range of products and services to the customer to limit the customer's risk of experiencing toll fraud.

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1 In the Matter of Policies and Rules concerning Toll Fraud, CC Docket No. 93-292, FCC 93-496, Notice of Proposed Rulemaking, released December 2, 1993 (hereinafter "NPRM").

2 See Comments of Ericsson at page 3.

3 See Comments of AT&T at pages 8-9.

As the Ericsson Corporation points out in their comments[4], PBX manufacturers use security features to distinguish their product(s) in the competitive market that currently exists for PBX equipment. Intecom has provided education through the Intecom User's Group Association, documentation generally distributed throughout the customer base and a Network Security Audit Program made available as an option to customers who desire to evaluate their system security. These measures are taken in addition to the provision of a feature-rich telecommunications system which provides such capabilities as:

- authorization codes with flexible length which may be prefixed or postfixed to dialed digits, may be assigned to be trunk group sensitive, may be interrelated with class of service capabilities and may be modified based on time of day and day of week
- the options of system access, group authorization AND outside dialing authorization codes (of differing lengths) for Direct Inward System Access (DISA);
- routing limitations and call blocking, including the ability to modify restrictions based on time of day and day of week
- the ability to generate call records for abandoned calls, invalid authorization code or system access codes, restricted call attempts, and blocked call attempts
- callback feature for remote system access

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[4] See Comments of Ericsson at page 3.

- data security application based on computer-telephony integration provides per-computer host security, caller on-site/off-site differentiation, time of day controlled access, dial back security and name/password or name/next password security

Based on current manufacturer activity with respect to system security features, and on the statistics exhibited by AT&T[5], Intecom joins NATA[6] and Ericsson[7] in asserting that these incentives are working and no additional incentive is required.

II. Toll Fraud Liability

Intecom supports the position, best detailed in comments by AT&T[8] and the North American Telecommunications Association (NATA)[9], that the PBX manufacturer can provide information on toll fraud and available security features but has no control over security measures taken for any given system. Therefore Intecom believes that a PBX manufacturer that has provided this information should have no further liability for toll fraud.

The PBX manufacturer can make security features available to customers, but cannot enforce the use of those features. Nor can the PBX manufacturer be expected to anticipate all of the possibilities for toll fraud that exist within the almost unlimited combination of other telecommunications products that may be

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5 See Comments of AT&T at page 9.
6 See Comments of NATA at page 14.
7 See Comments of Ericsson at page 7.
8 See Comments of AT&T at pages 10-11.
9 See Comments of NATA at pages 6-8.

combined with the PBX in the customer's complete telecommunications network. Even those customers who do make use of the available features may make decisions that trade risk for user convenience.

The manufacturer can make suggestions regarding feature use, and in the case of direct sales may even implement security features at the customer's direction during initial installation. However, the manufacturer's influence stops there and the potential for toll fraud moves under the strict control of the equipment owner. As the third-party market for used equipment grows more active, it is increasingly probable that equipment ownership may change without the knowledge of the manufacturer. Even without changing ownership, equipment may be re-configured or re-installed without the knowledge of the manufacturer. The manufacturer can certainly not control changes made to the system through day to day operations OR ensure that monitoring procedures are followed to detect toll fraud attempts and take action.

In short, without control over the equipment, the PBX manufacturer should not be held accountable for its use or mis-use. Therefore, the cost of PBX-based fraud should not be apportioned to any degree to the PBX manufacturer[10].

III. Toll Fraud Warnings

Most commenters agree that warnings regarding the potential of toll fraud should be published to the customer, and Intecom concurs with this position. Intecom agrees with Northern Telecom[11], Ericsson[12], AT&T[13] and others that

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10 See Notice, paragraph 25.

11 See Comments of Northern Telecom at page 7.

warnings can be provided to the customer without undue cost to the manufacturer if the rule is instituted on a 'go forward' basis and if the manufacturer is given sufficient latitude in selection of the placement of such warnings.

Intecom supports the position put forward by NATA[14] and Ericsson[15] that toll fraud warnings on the packaging of PBX equipment would be ineffective. The packaging of PBX equipment is rarely seen by the customer. In the rare instance where customer personnel might see the packaging, that personnel would be present in relation to the hardware installation and have little or no interaction with personnel who would implement security features through database administration. Although it might be slightly more effective to place the warning on the main system equipment rather than on the packaging as Northern Telecom[16] suggests, the placement of the warning still seems to miss the intended customer.

Due to the movement of equipment after the original sale, it would be prohibitively expensive, if not in fact impossible for a manufacturer to locate the current owner of each system sold by that manufacturer. Therefore, Intecom encourages the commission to consider that any requirement for printed warnings should apply only to equipment and documentation shipped after such a rule is put in place.

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12 See Comments of Ericsson at pages 4 & 9.
13 See Comments of AT&T at pages 6-7.
14 See Comments of NATA at page 11.
15 See Comments of Ericsson at page 8.
16 See Comments of Northern Telecom at page 7.

Intecom feels that the most appropriate placement for a more detailed warning would be in documentation that will reach the telecommunications manager and/or database administrator for the system (any requirement to place toll fraud warnings in *all* customer documentation, including telephone user guides, would seem to be excessive). Flexibility is required in the specification of the actual document which should contain the warning since publishing and distribution of manuals differs by manufacturer.

The warning to the customer should describe the risk of toll fraud and features which can be used for prevention and detection. The customer must then address the issue of security with individual users in the form of specific instructions on the importance and use of security features the customer has implemented. Any warning printed by the manufacturer in user documentation (such as a phone manual) would be necessarily vague since it is written independently of the customer's specific implementation.

Intecom shares Ericsson's[17] concern regarding the excessively broad nature of the proposal requiring a manufacturer to "discuss the customer's financial exposure". Such a warning which must attempt to discuss financial exposure in specific dollar amounts would be necessarily vague - since specific financial exposure is directly related to the system type and implementation - and therefore would in many cases be an overstatement of the real risk for an individual customer. This overstatement would result more in instilling fear into the customer

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[17] See Comments of Ericsson at page 8.

than in the desired preventative action. Any such action to alarm the customer would discourage equipment sales and be directly detrimental to the PBX manufacturer, and ultimately to the industry.

In addition, warnings should only be required for documents which are revised or published after the ruling takes effect. Any attempt to locate all manuals currently in use for the purpose of including addendum pages could result in prohibitive cost to the manufacturer. Intecom believes that current approaches to the customer base, as described in Section I, are sufficient warning for current customers of record.

Northern Telecom[18], Ericsson[19], and NATA[20] stated concern which Intecom shares regarding a potential rule to "adopt standards for determining whether FCC registrations for any classes of particularly risk-prone equipment should be revoked, or whether warnings should be required as updates to manuals currently in use."[21] The objective determination of standards for risk-prone equipment would seem to be extremely difficult, given the range and complexity of products involved. Any comparison of a class of equipment or a particular vendor/model of equipment must include a thorough evaluation of all aspects of the complete telecommunications system - in the case of PBX equipment, a very complex undertaking which would likely be prone to variances in understanding and interpretation.

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18 See Comments of Northern Telecom at page 8.
19 See Comments of Ericsson at pages 8-9.
20 See Comments of NATA at page 13.
21 Notice, paragraph 40.

IV. CONCLUSION

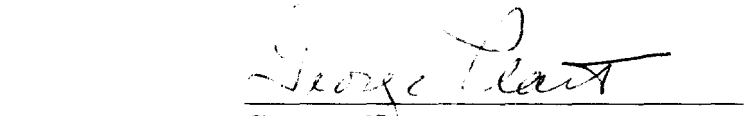
As noted by the Commission and numerous commenters, products and services are increasingly available to PBX customers, and with education, customers are acting to detect and prevent fraud. As described earlier, Intecom currently provides information to our customers on the risks of toll fraud and features which may be used for prevention and detection. However, Intecom is willing to modify our system documentation to contain those warnings regarding toll fraud the Commission deems appropriate.

Based on the inability of the PBX manufacturer to detect, control and prevent toll fraud, Intecom encourages the Commission to rely on the telecommunications market to provide incentives for further security enhancements rather than allocating the liability of toll fraud to the PBX manufacturer.

Respectfully Submitted,

INTECOM, INC.

February 7, 1994



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VERIFICATION

I, George Platt, President of Intecom, Inc., hereby verify that the information contained in the preceding Reply Comments are true and accurate to the best of my knowledge.

February 7, 1994

George Platt
President, Intecom, Inc.

Norma Martin
Notary